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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,696	12/05/2003	Richard D. Borovoy	14109-003002	4580

26181 7590 09/13/2006  
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MINNEAPOLIS, MN 55440-1022

EXAMINER
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LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/729,696	<b>Applicant(s)</b> BOROVOY ET AL.	
	<b>Examiner</b> Julie Lieu	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                               |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                          | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/06</u> | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed July 05, 06. Claims 5, 21-23 have been amended. New claims 24-27 have been added.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The indicated allowability of claims 1-19 is withdrawn. The reason for allowability indication was due to the examiner's narrow interpretation of the limitation "the text information expressing commonalities between social networks of the two wearers."

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lightman et al. (US Patent No. 6,711,414).

Claim 1:

Lightman et al. (Lightman) discloses a method of communicating face-to-face using two display units, the display unit of a second wearer being worn on his or her person in a manner visible to a first wearer, comprising:

- a. passing a first packet of information electronically from the display unit of the first wearer to the display unit of the second wearer, the information including data pertaining to the social network of the first wearer (col. 3, line 66 to col. 4 line 23); and
- b. displaying text information on the display unit.

Though the reference fails to clearly state the that LCD in the device displays text information on the display unit of the second wearer that is based upon a comparison between the first packet of information and a second packet of information contained within the display unit of the second wearer, the reference does infer that in col. 5, last paragraph. In the paragraph, the reference explains the use of the LEDs to express the level of information matching while in this paragraph the reference also discusses using a LCD 212 to display text, though it does not clearly indicate that the text information expressing the affinity between the social networks of the two wearers. The discussion of the use of LEDs to indicate the matching

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between the two database is only another embodiment wherein the LEDs are use for that purpose instead of the display.

Claim 2:

The displaying information step in Lightman is carried out in response to the receipt by the display unit of the second wearer of the first packet of information.

Claim 3:

Each display unit 200 being worn on the person of the wearer in a manner to be visible to the wearer of the other display unit. Col. 6, first paragraph.

Claim 4:

In Lightman's system, the first wearer takes an action based upon the displayed information on the display of the second wearer.

Claim 5:

In Lightman's system, the action being using at least a portion of the second packet of information.

Claims 6, 8, 10, 15-19:

The reference suggests the device is used in social filtering though it fails to specifically disclosed that the action being an attempt to find a person. However, usually people are involved in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer and a third person or persons and to find the third person as desired. In Lightman's system, the second packet of information being information related to a third person who is not the first or second wearer but the person the first wearer is looking for.

Claim 7:

The second packet of information in Lightman's is information related to the second wearer.

Claim 9:

The first packet of information in Lightman's is information related to the first wearer.

Claims 11 and 12:

Though the reference fails to disclose that the first and second packets of information being time-related, it would have been obvious to a skilled artisan to use the Lightman device for time-related information purposes as desired.

Claims 13-14:

The reference suggests the device is used in social filtering. Usually people are involved in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer and a third person or persons and to find the third person as desired. Furthermore, one skilled in the art would have readily recognized implementing the system in Lightman to provide any information as desired, it is only a matter of choice in design.

Claim 20:

Lightman et al. (Lightman) discloses a method of communicating face-to-face using two display units, the display unit of a second wearer being worn on his or her person in a manner visible to a first wearer, comprising:

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- c. passing a first packet of information electronically from the display unit of the first wearer to the display unit of the second wearer, the information including data pertaining to the social network of the first wearer (col. 3, line 66 to col. 4 line 23); and
- d. displaying text information on the display unit.

Though the reference fails to clearly state the that LCD in the device displays text information on the display unit of the second wearer that is based upon a comparison between the first packet of information and a second packet of information contained within the display unit of the second wearer, the reference does infer that in col. 5, last paragraph. In the paragraph, the reference explains the use of the LEDs to express the level of information matching while in this paragraph the reference also discusses using a LCD 212 to display text, though it does not clearly indicate that the text information expressing the affinity between the social networks of the two wearers. The discussion of the use of LEDs to indicate the matching between the two database is only another embodiment wherein the LEDs are use for that purpose instead of the display.

Regarding the claimed information including personal information about the wearer that includes information relating to people known to the first wearer, the reference suggests the device is used in social filtering though it fails to specifically disclose that the information relating to people known to the first wearer. However, usually people are involved in social filtering. Thus, one skilled in the art would have readily recognized using the system of Lightman's for finding commonalities of in the social relation of the wearer, thus, would include information relating to people known to the first wearer or second wearer for social filtering purposes.

7. Claims 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Lightman et al. (US Patent No. 6,711,414) in view of Lee (US 2002/0180762).

Claim 21:

Lightman discloses a wearable electronic display unit for displaying images and for communicating with other similar wearable displays, comprising:

- a. A first display unit 200 capable of displaying text and graphics, having access to information the first person's social network database; and
- b. Information transmitting and receiving interface (col. 6, lines 36-54), when the interface faces in a direction of a short-range substantially unidirectional communication the communication is possible between displays worn by the first and second persons, the display having the capability to (1) receive information relating to another person's social network, (2) analyze the received information and the information about the first person's social network, and (3) display information based on the analysis.

See col. 3, line 66 to col. 4, line 23; col. 5, line 15 to col. 6, line 54; col. 8, lines 12-67; and col. 9, lines 1-46.

Lightman fails to disclose a first mode and second mode. However, the concept of displaying information on a display worn by a wearer, wherein text is display in two different mode, first mode is adapted for viewing at a distance by a second person, and second is adapted for viewing by a first person (wearer) is known in the art as taught in Lee. See front-page figure. In light of this teaching, a skilled artisan would have readily recognized incorporating this feature in the Lightman system because it will aid the viewer in viewing the display

Claim 22:



The short-range substantially unidirectional communication is carried on a channel that transmits and receives an infrared beam (col. 6, lines 36-54).

Claim 23:

Lee teaches using a sensor 140 that detects the orientation of the display relative to the vertical and provides an electronic signal to indicate the orientation.

Claims 24 and 26:

The display in the combined system of Lightman and Lee operating in the first mode, wherein the text has one orientation relative to vertical, in the second mode, the text has a different orientation relative to vertical. Front-page figure.

Claim 25:

Though Lightman fails to disclose changing to a larger text size in a second mode, one of ordinary skilled in the art would have readily recognized changing the text font to a larger font so that the text can easily be viewed by a viewer.

Claim 27:

Sensor 140 in Lee detects whether the display is oriented substantially in one orientation relative to vertical, or substantially in another vertical orientation relative to vertical, and provides an electronic signal to indicate the orientation whereby, in response to the signal from the sensor indicating that the display is oriented substantially in the one orientation, the display displays text and graphics in the first mode, and in response to a signal from the sensor that the display is oriented in the opposite orientation, the display displays text and graphics in the second mode.

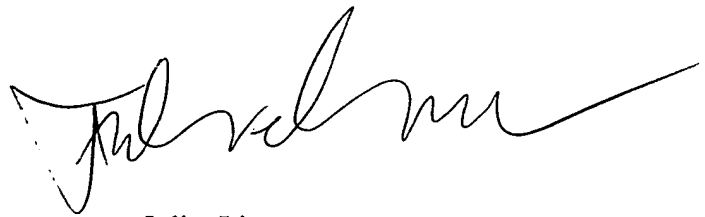
*Response to Arguments*

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal flourish extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2612

Sept. 08, 06